Fig.1

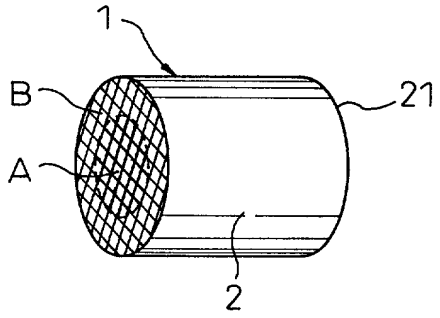

1
B
21
A
2

Fig.2

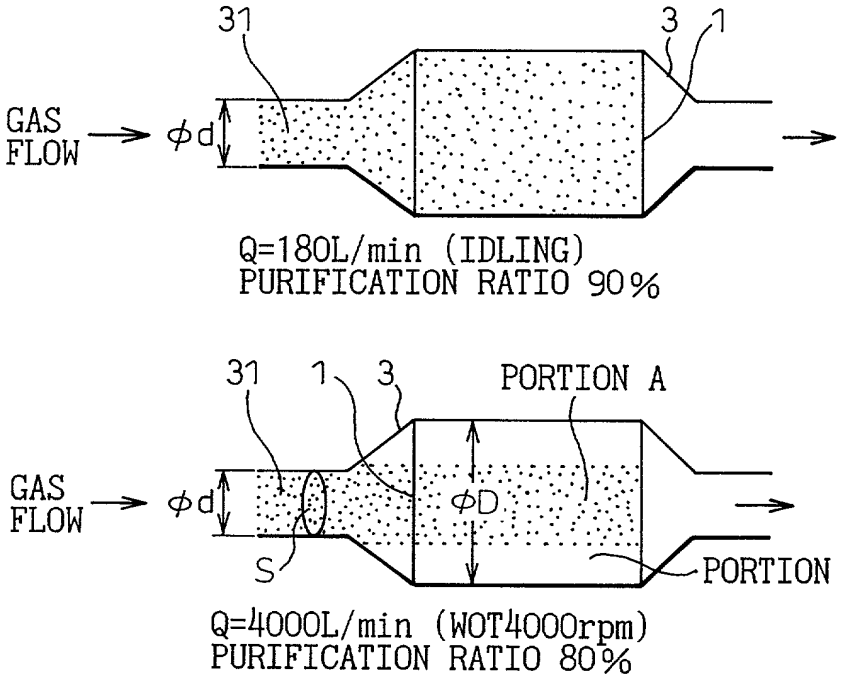

31
3
1
GAS
FLOW
φd
Q=180L/min (IDLING)
PURIFICATION RATIO 90%
31
1
3
PORTION A
GAS
FLOW
φd
φD
S
PORTION B
Q=4000L/min (WOT4000rpm)
PURIFICATION RATIO 80%

Fig.3

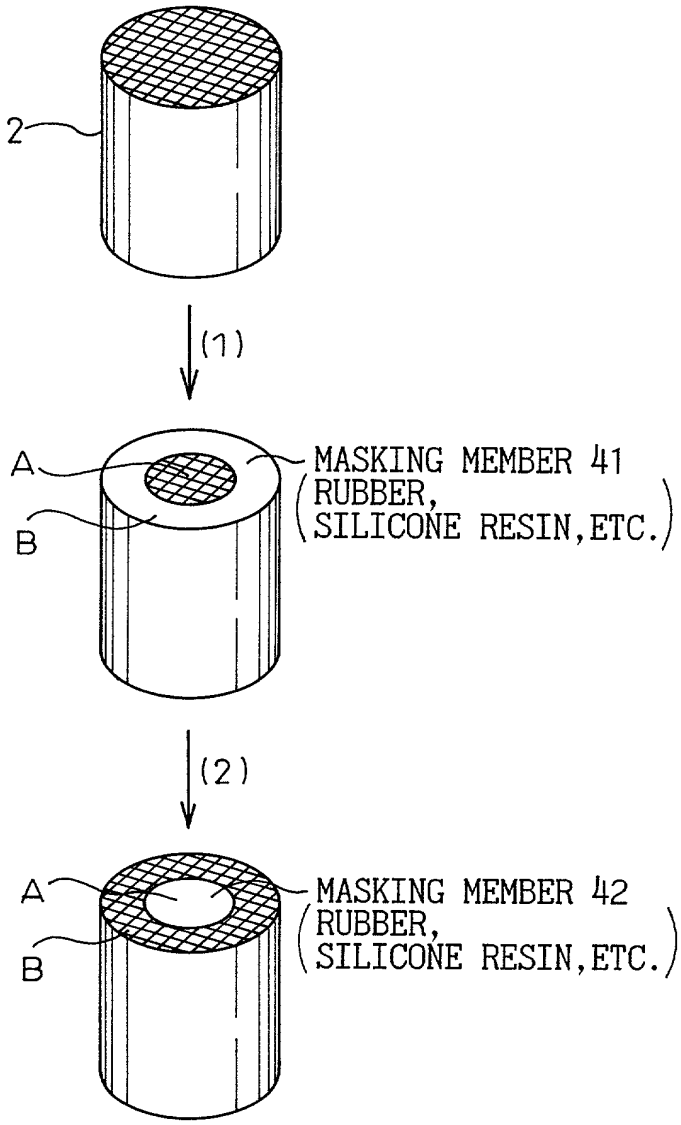

2
(1)
A
B
MASKING MEMBER 41
(RUBBER,
SILICONE RESIN, ETC.)
(2)
A
B
MASKING MEMBER 42
(RUBBER,
SILICONE RESIN, ETC.)

Fig.4

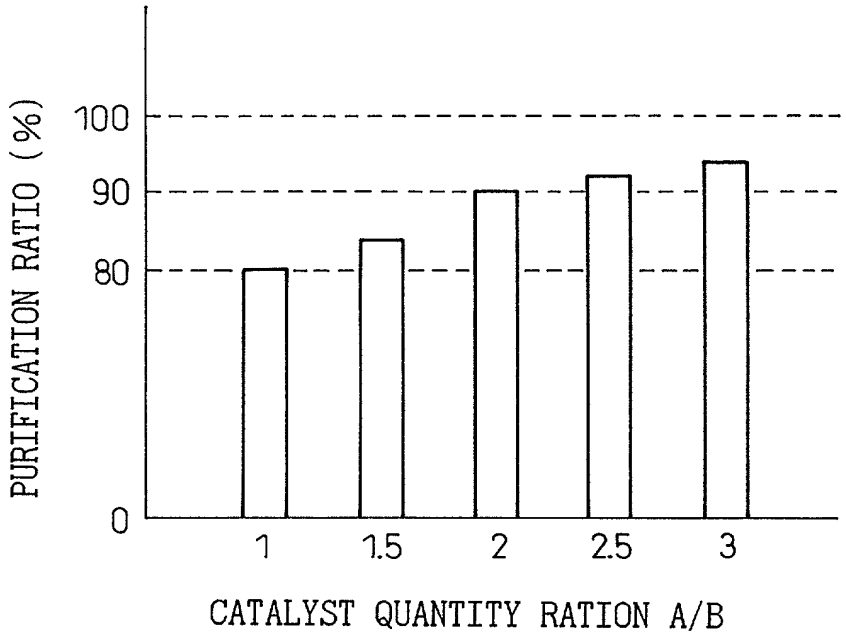

PURIFICATION RATIO (%)
100
90
80
0
1
1.5
2
2.5
3
CATALYST QUANTITY RATION A/B

Fig.5(a)

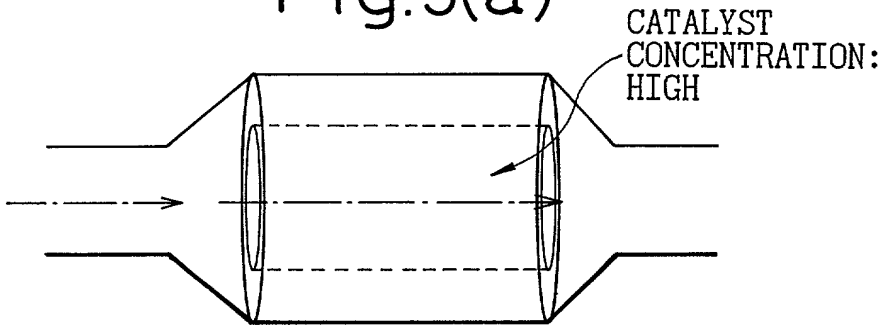


Fig.5(b)

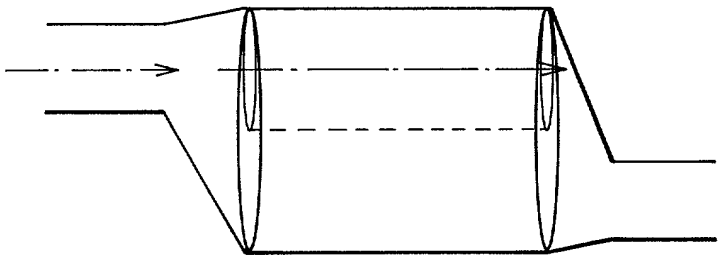


Fig.5(c)

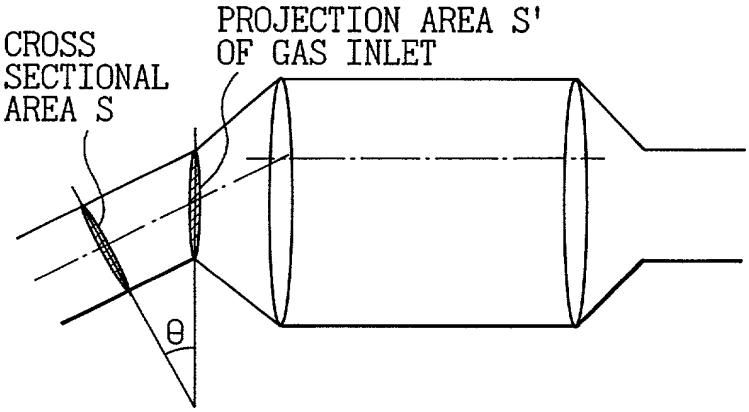


Fig.6(a)

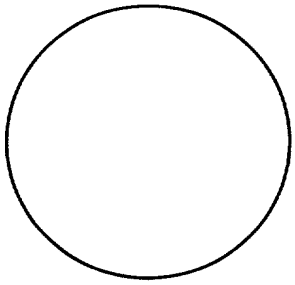


Fig.6(b)

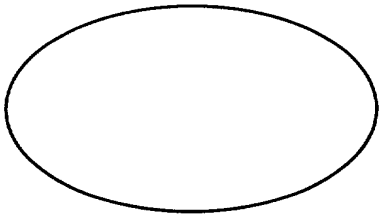


Fig.6(c)

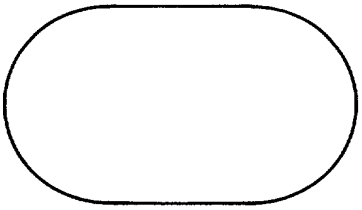


Fig.6(d)

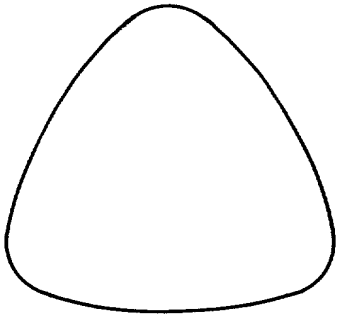


Fig.6(e)

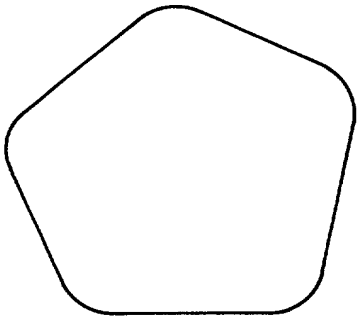


Fig.7(a)

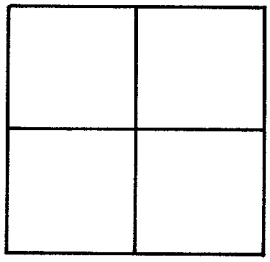


Fig.7(b)

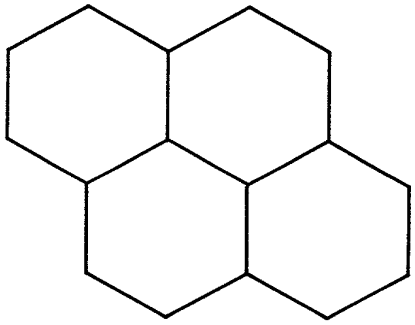
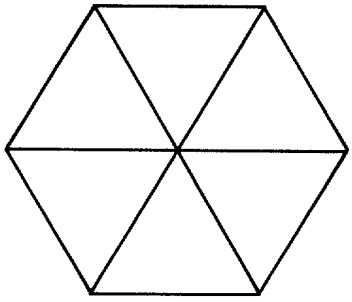


Fig.7(c)



EP 0 954 954 B1

Fig.8(a)

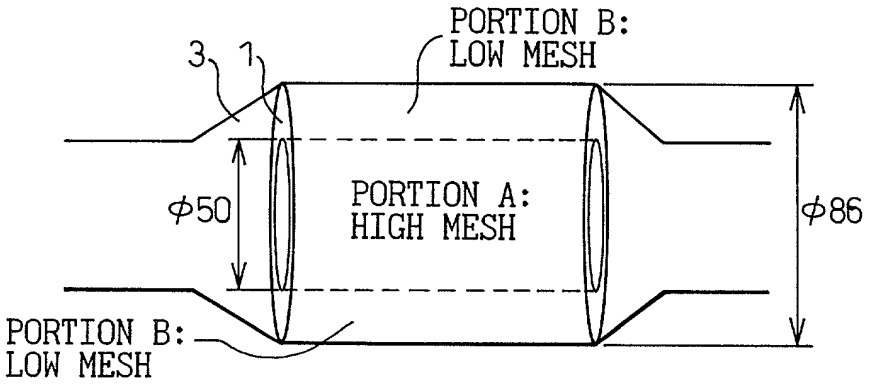


Fig.8(b) Fig.8(c) Fig.8(d)

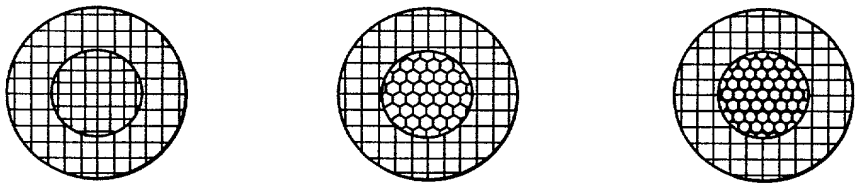


Fig.8(e) Fig.8(f) Fig.8(g)

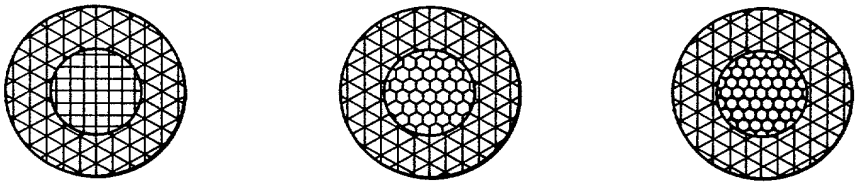


Fig.8(h)

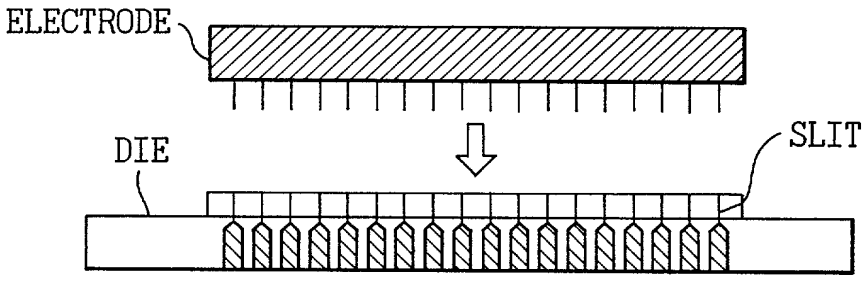


Fig.9

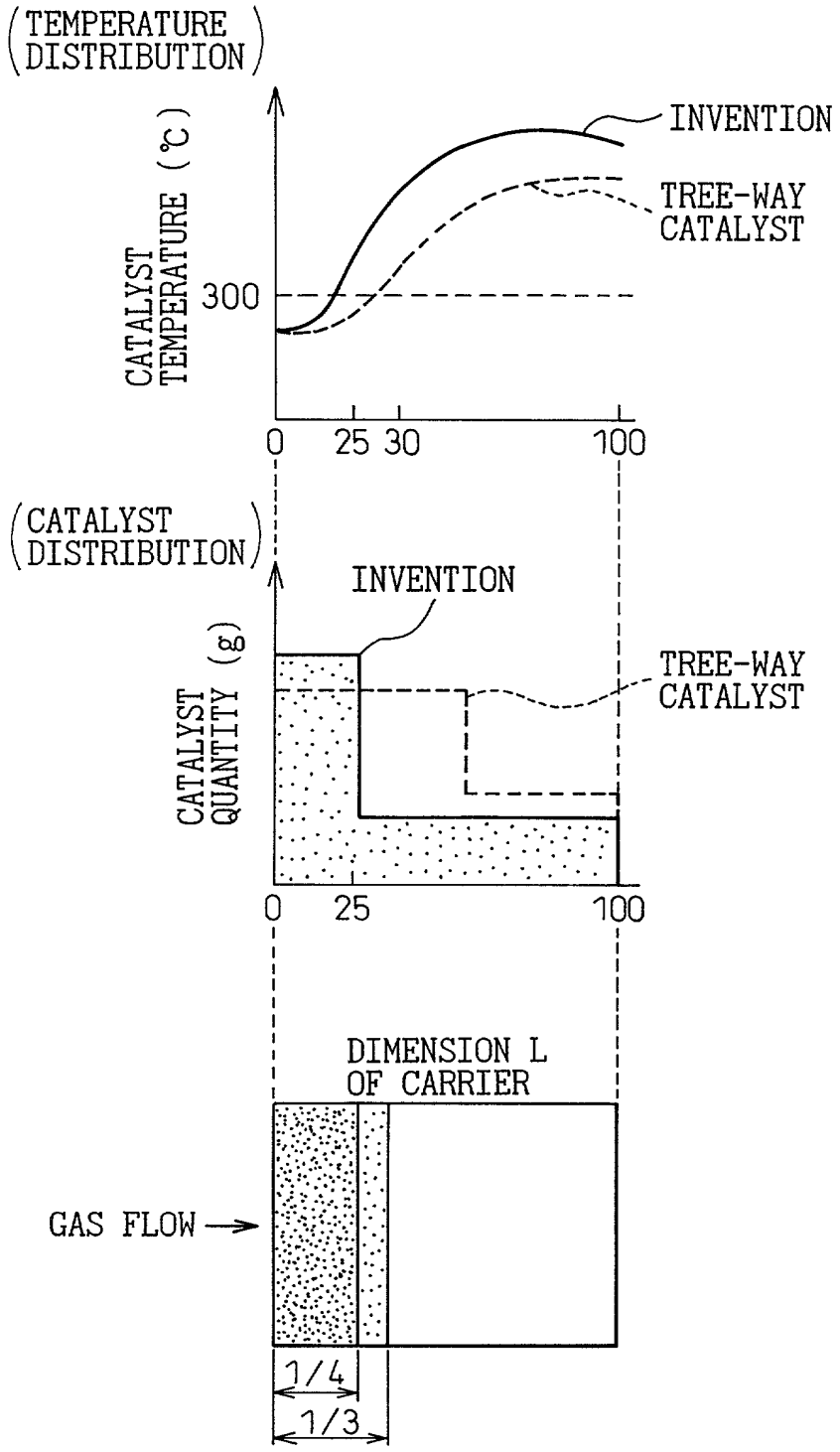

(TEMPERATURE DISTRIBUTION)
CATALYST TEMPERATURE (℃)
300
INVENTION
TREE-WAY CATALYST
0
25
30
100
(CATALYST DISTRIBUTION)
CATALYST QUANTITY (g)
INVENTION
TREE-WAY CATALYST
0
25
100
DIMENSION L OF CARRIER
GAS FLOW
1/4
1/3

Fig.10(a)

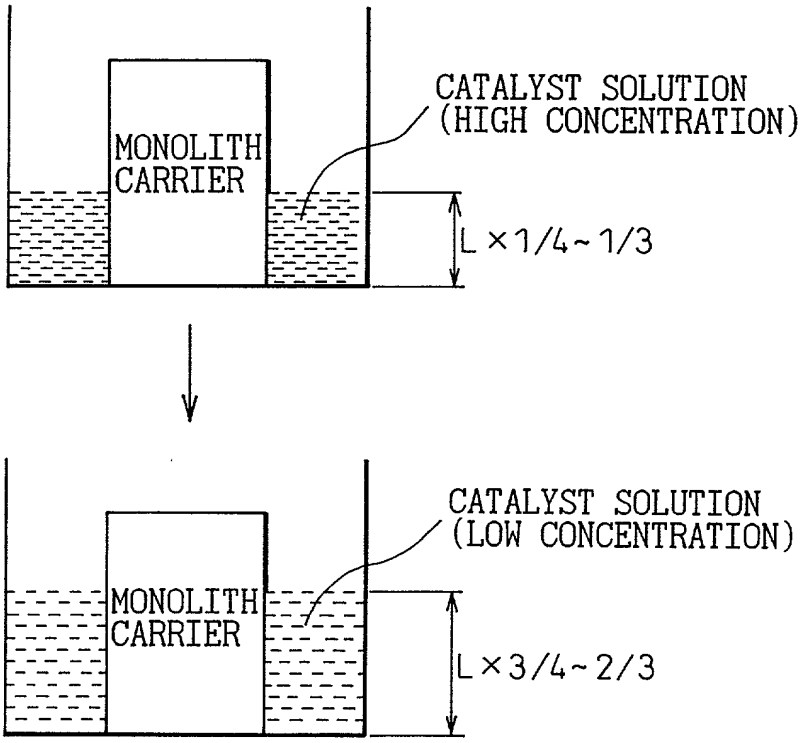


Fig.10(b)

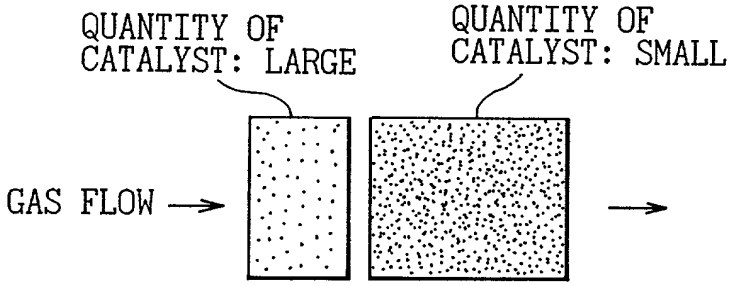


Fig.11(a)

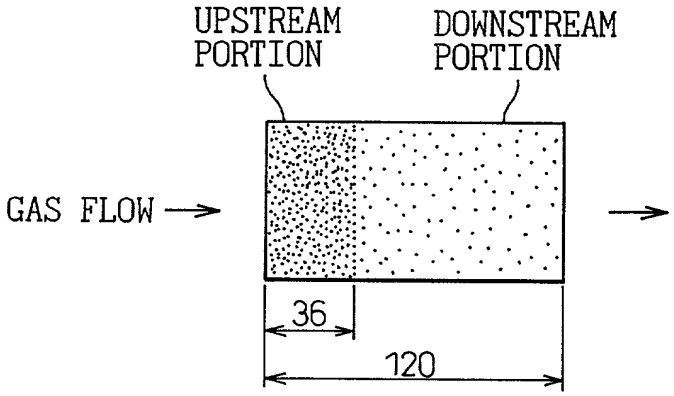


Fig.11(b)

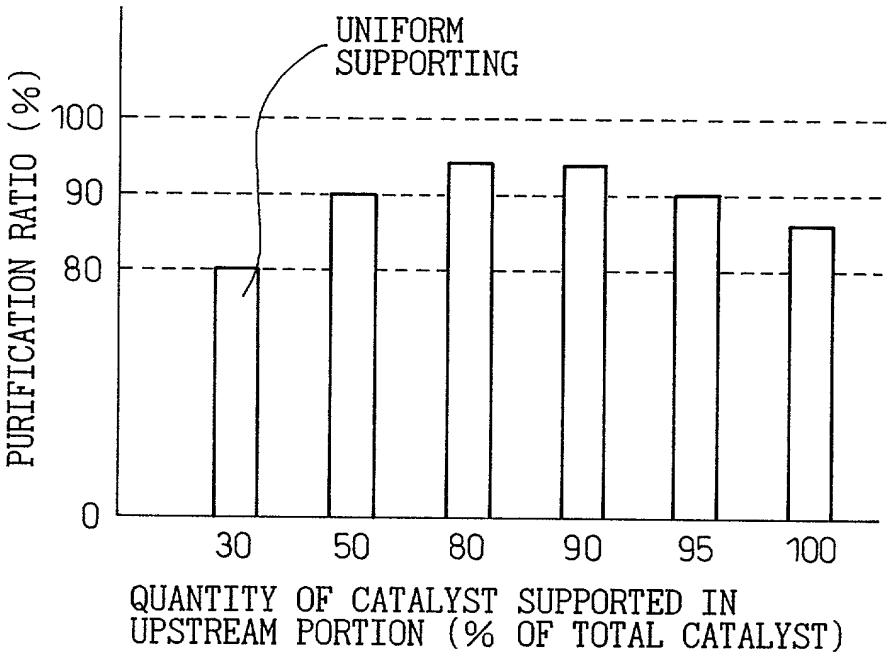


Fig.12(a)

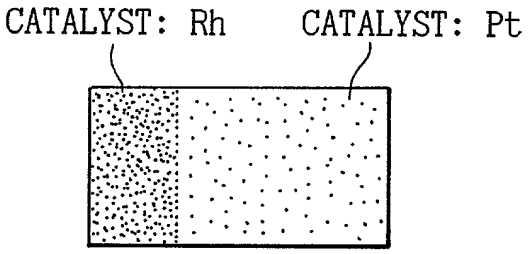


Fig.12(b)

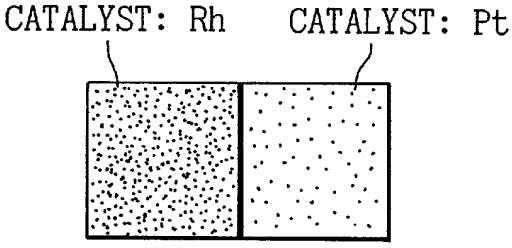


Fig.13

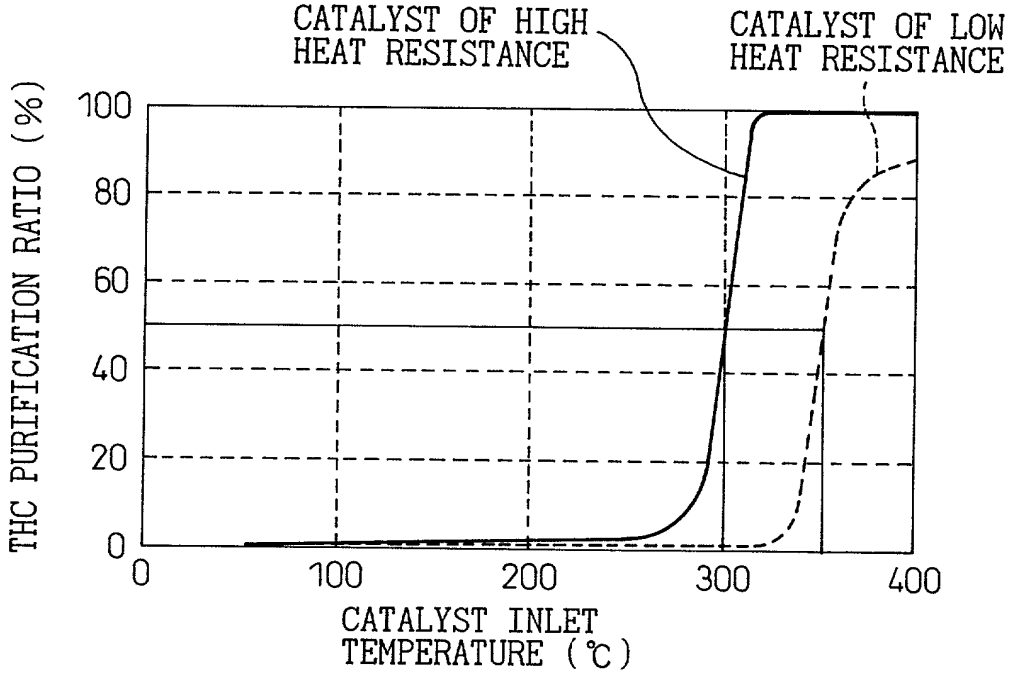

CATALYST OF HIGH HEAT RESISTANCE
CATALYST OF LOW HEAT RESISTANCE
THC PURIFICATION RATIO (%)
100
80
60
40
20
0
0
100
200
300
400
CATALYST INLET TEMPERATURE (℃)

Fig.14

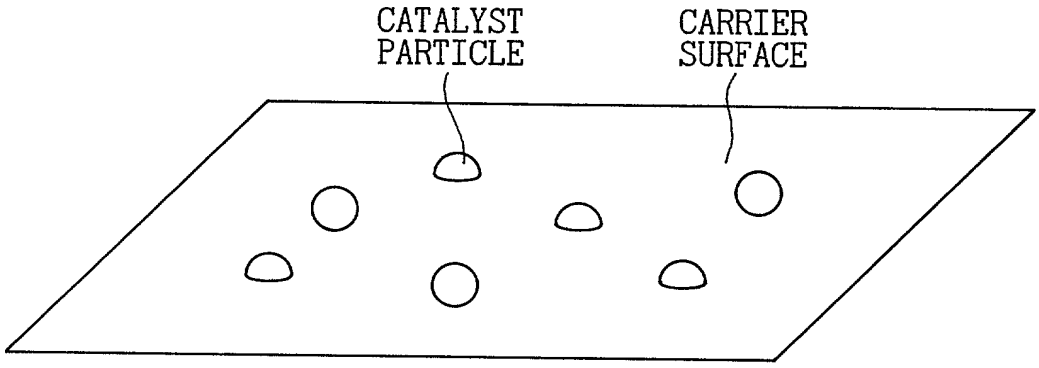

CATALYST PARTICLE
CARRIER SURFACE

Fig.15(a)

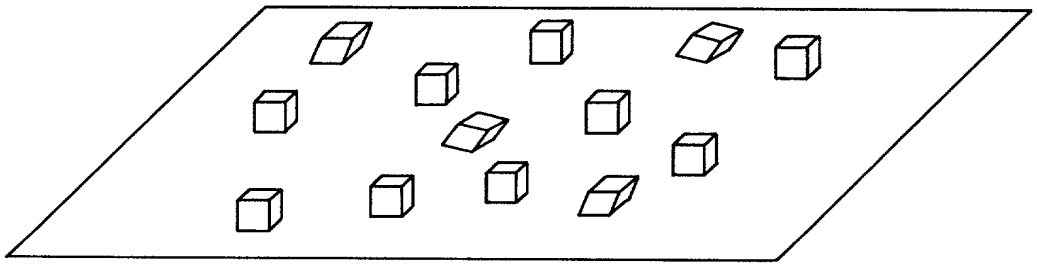


Fig.15(b)

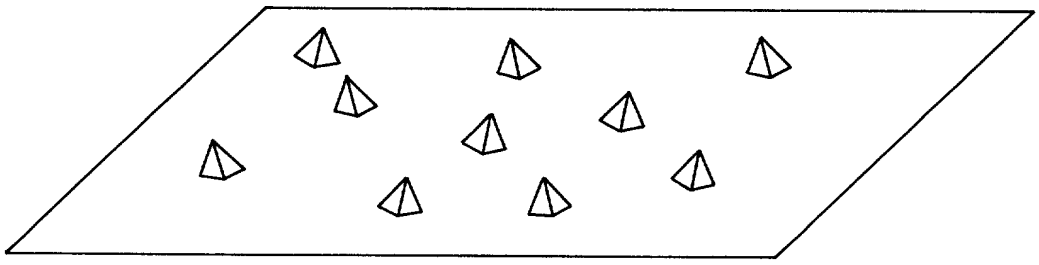
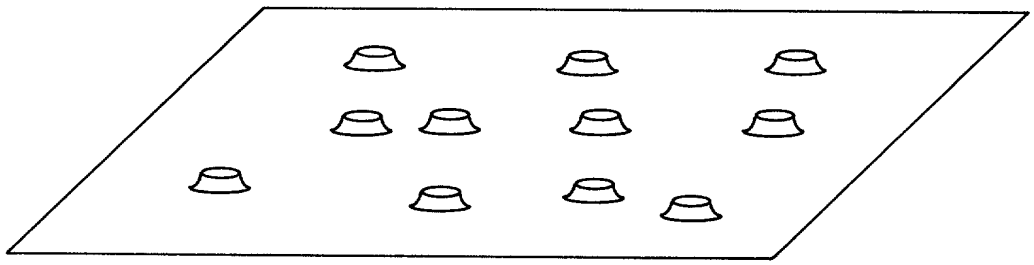


Fig.16



EP 0 475 650 A2

Fig.17(a)

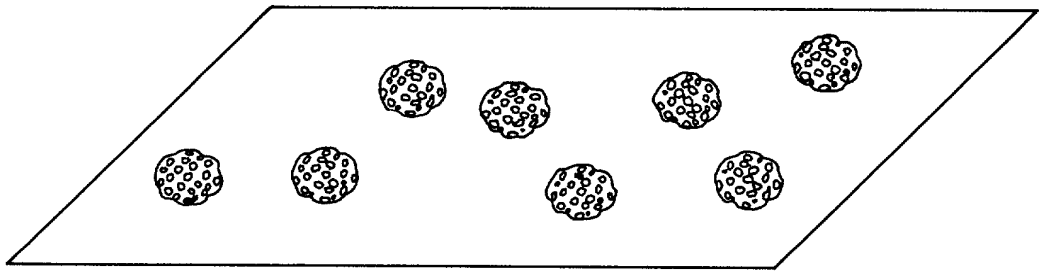


Fig.17(b)

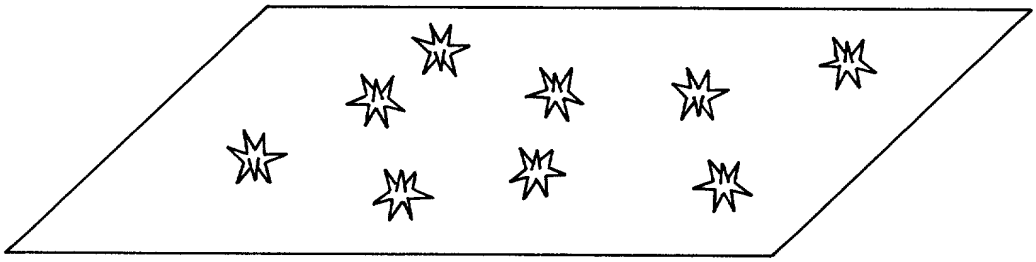


Fig.18

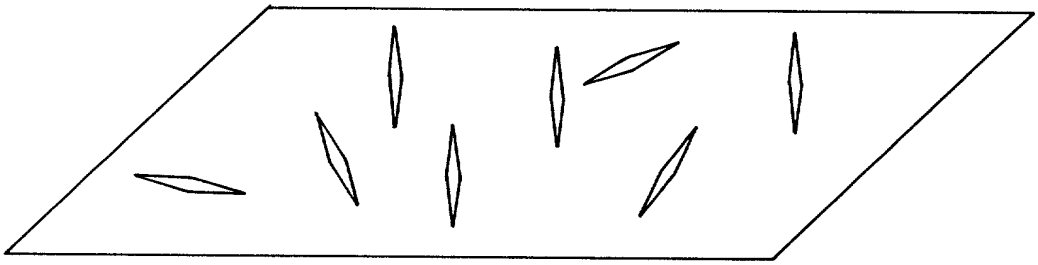
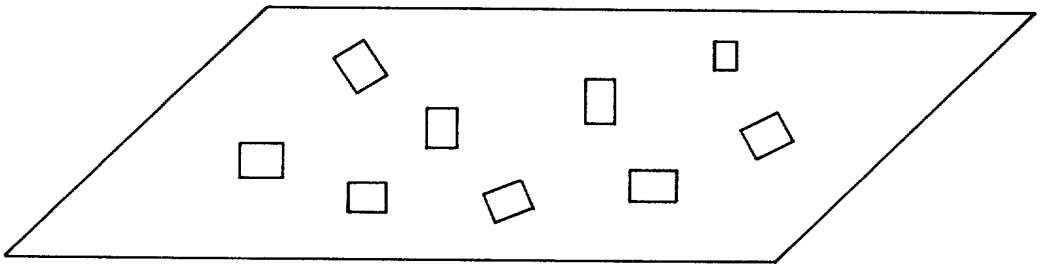


Fig.19



Patent Publication

Fig.20(a)

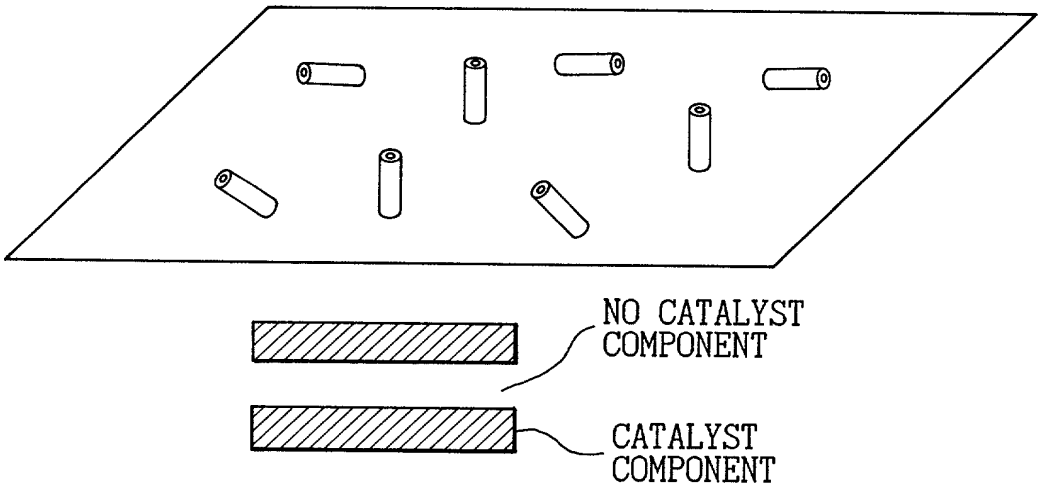
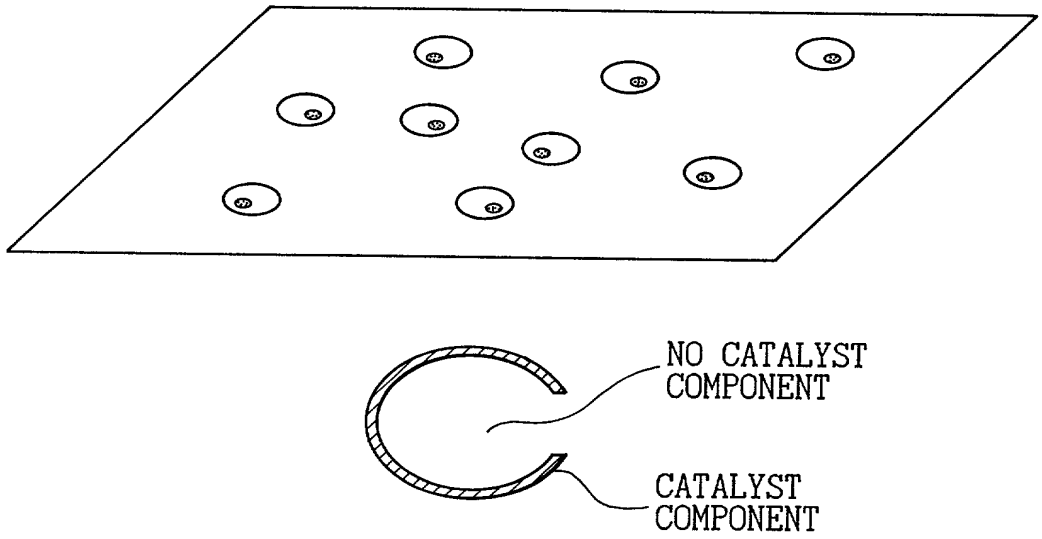


Fig.20(b)



JP04250649A2 920907

Fig.21

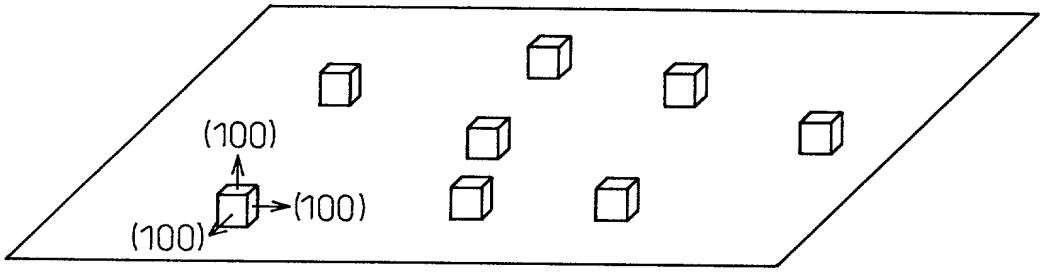
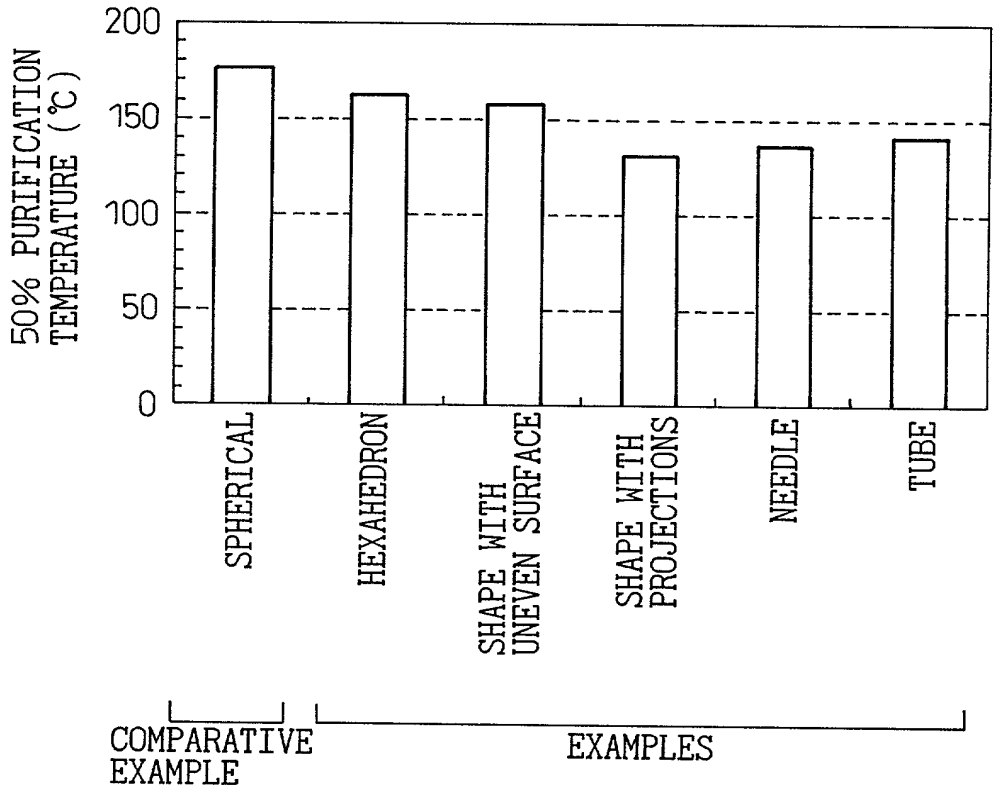

(100)
(100)
(100)

Fig.22


50% PURIFICATION TEMPERATURE (℃)
200
150
100
50
0
SPHERICAL
HEXAHEDRON
SHAPE WITH UNEVEN SURFACE
SHAPE WITH PROJECTIONS
NEEDLE
TUBE
COMPARATIVE EXAMPLE
EXAMPLES